CLAIMS

WHAT IS CLAIMED IS:

1.   A communications system, comprising:

a network interface card (NIC); and

a management device coupled to the NIC,

wherein the NIC is adapted to merge communications traffic of the management device with the NIC.

2.   The system according to claim 1, wherein the communications system provides an integrated management solution.

3.   The system according to claim 1,

wherein the NIC is coupled to a network, and

wherein the NIC comprises a sole connection to the network for the management device.

4.   The system according to claim 1, wherein the NIC comprises a standard NIC.

5.   The system according to claim 1, wherein the NIC comprises a universal management port (UMP).

6.   The system according to claim 1, wherein the NIC comprises an Ethernet connection port.

7.   The system according to claim 1, wherein the NIC comprises one or more filters and a NIC processor.

8.	The system according to claim 7,

wherein the NIC processor is coupled to a NIC MAC and is coupled to the one or more filters,

wherein the one or more filters are coupled to the NIC MAC, and

wherein the NIC MAC is coupled to a network.

9.	The system according to claim 7,

wherein the NIC processor is coupled to a MAC, and

wherein the MAC is coupled to the management device.

10.	The system according to claim 9, wherein the management device configures the one or more filters.

11.	The system according to claim 9,

wherein the management device sends one or more commands to the NIC processor, and

wherein the NIC processor configures the one or more filters based upon the one or more commands.

12.	The system according to claim 11, wherein the NIC processor responds to a command with a corresponding response to the management device.

13.	The system according to claim 12, wherein the NIC stores only a latest response to a received and expected command.

14.	The system according to claim 12, wherein the command and the corresponding response each comprise an identical sequence number.

15.	The system according to claim 12, wherein the management device stores a particular command until a corresponding response has been received.

16.   The system according to claim 1, wherein the management device comprises a management processor and a MAC, the management processor being coupled to the MAC, the MAC being coupled to the NIC.

17.   The system according to claim 16, wherein the MAC of the management device is coupled to a MAC of the NIC.

18.   The system according to claim 1, wherein management traffic, commands and responses are passed between the NIC and the management device.

19.   The system according to claim 1, further comprising:

a plurality of additional NICs, each additional NIC being coupled to the management device,

wherein if the NIC fails, then the management device selects a NIC from the plurality of additional NICs to exclusively provide access to and from the network for the management device.

20.   The system according to claim 1,

wherein the NIC and the management device are part of a server system,

wherein the server system comprises a host, system controls and system sensors,

wherein the NIC and the management device are coupled to the host, and

wherein the management device is coupled to the system controls and the system sensors.

21.   The system according to claim 1, wherein the management device comprises an intelligent management device.

22.   A communications system, comprising:

a first network interface card (NIC) coupled to a network;

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a second NIC coupled to the network; and

a manager coupled to the first NIC and the second NIC, the manager initially being in two-way communications with the network via the first NIC,

wherein, if the first NIC fails, then the manager switches from the first NIC to the second NIC and is in two-way communications with the network via the second NIC.

23. The system according to claim 22, wherein the manager is initially in two-way communications with the network exclusively through the first NIC.

24. The system according to claim 22, wherein, if the first NIC fails, then the manager switches from the first NIC to the second NIC and is in two-way communications with the network exclusively through the second NIC.

25. The system according to claim 22, wherein the first NIC, the second NIC and the manager are part of a server system that is coupled to the network.

26. The system according to claim 22,

wherein the first NIC comprises a first filter,

wherein the second NIC comprises a second filter, and

wherein the first filter and the second filter are configurable by the manager.

27. The system according to claim 22, further comprising:

system controls coupled to the manager; and

system sensors coupled to the manager.

28. The system according to claim 27, wherein the manager monitors the system sensors and reports system alerts over the network.

29. The system according to claim 27, wherein the manager sets system controls in response to commands received over the network.

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30.   The system according to claim 22, further comprising:

a management console coupled to the network,

wherein the management console receives user input and sends the user input to the manager over the network,

wherein the manager responds to the user input with a response and sends the response to the management console over the network, and

wherein the response is seemlessly output at the management console.

31.   The system according to claim 30, wherein the management console seemlessly provides remote management of the manager.

32.   The system according to claim 22,

wherein the first NIC, the second NIC and the manager are part of a server system,

wherein the server system comprises a host, and

wherein the first NIC, the second NIC and the manager are each coupled to the host via a system interconnect.

33.   The system according to claim 32, wherein the server system comprises a peripheral device that is coupled to the system interconnect.

34.   The system according to claim 32, wherein the server system comprises one or more central processors and a memory, the one or more central processors and the memory are each coupled to the system interconnect.

35.   The system according to claim 32,

wherein the first NIC is coupled to the network via the first switch, and

wherein the second NIC is coupled to the network via a second switch.

36. The system according to claim 22, wherein the manager comprises an intelligent management device.

37. A method for communications, comprising:

(a) providing access to and from a network for a management device via a NIC;

(b) configuring one or more filters of the NIC via one or more commands generated by the management device;

(c) filtering incoming packets via the one or more filters; and

(d) forwarding the filtered packets based upon one or more matches between information carried by the filtered packets and one or more filtering parameters.

38. The method according to claim 37, wherein (d) comprises sending the filtered packets to the management device for local processing.

39. The method according to claim 37, wherein the incoming packets to the NIC are forwarded as received if the incoming packets do not carry information matching one or more filtering parameters.

40. The method according to claim 37, wherein the incoming packets to the NIC are forwarded as received if the one or more filters are not properly configured.

41. A method of communications between a NIC and a management device, comprising:

generating a command in the management device, the command comprising a particular sequence number;

storing the command in the management device;

sending the command to a selected NIC;

executing the command in the selected NIC; and

generating a response to the command, the response comprising the particular sequence number.

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42.   The method according to claim 41, further comprising:

sending the response to the management device; and

deleting the stored command comprising the particular sequence number.

43.   The method according to claim 41, wherein executing the command comprises configuring one or more filters of the selected NIC.

44.   The method according to claim 41, further comprising:

storing only latest response to a command comprising an expected sequence number.

45.   The method according to claim 41, further comprising:

storing all outstanding commands in the management device.

46.   The method according to claim 41, further comprising:

resending a particular command if the particular command is still outstanding after a threshold time period.

47.   The method according to claim 41, wherein a command can be re-executed by the selected NIC without an adverse effect.

48.   The method according to claim 41, wherein a command can be re-executed by the selected NIC without exhibiting a modal effect.

49.   The method according to claim 41, further comprising:

providing two-way communications between a network and the management device exclusively through the selected NIC.

50.   The method according to claim 41, wherein the selected NIC is selected from a plurality of NICs.

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51.   A method of remote management over a network, comprising:

accessing the network via a plurality of network interface cards (NICs) of a local server system;

communicating between a local manager of the local server system and a remote manager over the network through a NIC selected by the local manager, the selected NIC being one of the plurality of NICs;

managing the local server system via the local manager; and

responding locally to management commands sent over the network from the remote manager.

52.   The method according to claim 51, further comprising:

sending a response from the local manager to the remote manager.

53.   The method according to claim 52, wherein the sent response comprises graphical information.

54.   The method according to claim 51, wherein the selected NIC provides exclusive access to and from the network for the local manager.

55.   The method according to claim 54, wherein the local manager comprises an intelligent management device.

56.   The method according to claim 51, further comprising:

selecting another NIC of the plurality of NICs to provide exclusive access to and from the network for the local manager.